

REMARKS

The Office Action has been carefully reviewed. No claim is allowed. Claims 1, 2, 4, 5, 10, 11, 13, 14, 16-20 and 28-40 presently appear in this application and define patentable subject matter warranting their allowance. Reconsideration and allowance are hereby respectfully solicited.

The telephonic interview of December 1, 2010, is respectfully acknowledged. The undersigned proposed amendments to the claims that were substantially the same as those being made by this amendment, but without the newly added claims. The examiner indicated that the proposed amendments would not place the application in condition for allowance because it would raise new issues that require a new search and consideration.

Claims 1-5, 10-16 and 28-30 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. This rejection is respectfully traversed.

While applicant is not conceding to the examiner's position in this rejection because applicant still believes the present specification is enabling for the full scope of the originally claimed invention, applicant has now, without prejudice and for the purposes of business strategy, limited the scope of the rejected claims to c-di-GMP and the three specific bacterial pathogens recited in amended claim 1.

Enablement for attenuating the virulence of, or inhibiting or reducing colonization by, *Staphylococcus aureus* as the bacterial pathogen (one of the three recited bacterial pathogens in claim 1) is provided in Example 8 of the present specification as well as in the declaration filed October 6, 2008, with the showing referred to therein being in the submitted Karaolis et al., *J. Immunol.* 178:2171-2181 (2007) publication made of record.

Written support for the two other bacterial pathogens *Klebsiella pneumoniae* and *Streptococcus pneumoniae* recited in amended claim 1 is found in paragraph [0049] of the present specification (see lines 14 and 16 on page 240) and enablement is provided by the showing in the declaration filed October 6, 2008, referring to the submitted Karaolis et al., *Infection and Immunity* 75(10):4942-4950 (2007) publication and Ogunniyi et al. manuscript, both made of record. The support for enablement was further discussed in the amendment filed May 10, 2010, and summarized in the Summary Table attached thereto. Accordingly, the present invention is enabled for the full scope of the presently amended claims.

Reconsideration and withdrawal of this rejection are therefore respectfully requested.

Claims 1-7, 9-21 and 28-30 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the

written description requirement. This rejection is respectfully traversed.

While applicant is also not conceding to the examiner's position in this rejection because applicant still believes that the present specification provides adequate written description for the original claims, applicant has now, without prejudice and for the purpose of business strategy, limited the scope of the rejected claims to c-di-GMP and the specific bacterial pathogens recited in independent claims 1 and 17.

Paragraph [00113] on page 62 (see lines 4-7 of the paragraph) teaches that c-di-GMP inhibits *S. aureus* biofilm formation on a polystyrene bead, which is a solid (abiotic) surface. Paragraph [00117] teaches that c-di-GMP inhibits further development of pre-formed biofilm and paragraph [00118] teaches that c-di-GMP inhibits adherence and biofilm formation on a solid (biotic) surface. Explicit written description support for bacterial pathogens *Pseudomonas aeruginosa* and *Vibrio parahaemolyticus*, as recited in amended claim 17, is found in paragraph [0049] (see lines 16-17 on page 23). Enablement for inhibition of *P. aeruginosa* and *V. parahaemolyticus* biofilm formation on a solid surface, e.g., polystyrene bead, is demonstrated by the showing in the declaration filed October 6, 2008, that refer to the Mano et al., *Chem. Med. Chem.* 2:1410-1413 (2007), publication submitted and made of record. As the present

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claims are also amended to be limited to c-di-GMP, there is clearly adequate written description for the presently claimed invention.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

In view of the above, the claims comply with 35 U.S.C. §112 and define patentable subject matter warranting their allowance. Favorable consideration and early allowance are earnestly urged.

Respectfully submitted,

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